



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pGRL1132042453

**1RP - 2761**

**KEY ENERGY SERVICES, LLC**

# **Bronco Services**

**Key Brine Water Station  
Section 15 of Township 21 South, Range 37 East,  
Lea County, New Mexico**

## **Closure Report**

**April 17, 2012**



**Prepared By:**

***Safety & Environmental Solutions, Inc.  
703 East Clinton Street  
Hobbs, New Mexico 88240  
(575) 397-0510***

*Approved  
Steve Perkins  
Env. Specialist  
NMCCD-DIST 1  
4/19/12*

*2761*

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I. Company Contacts

Representative	Company	Telephone	E-mail
Sergio Contreras	SESI	575-397-0510	scontreras@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Bronco Services to perform cleanup services at the Key Brine Station along the northwest corner fence line of the facility. The facility is located in Section 15 of Township 21 South, Range 37 East, of Lea County New Mexico.

According to the C-141 dated May 31, 2011, the facility was affected by an overloaded truck due to the Bronco Services truck operator fell asleep while loading. Approximately 100 barrels of produced fluid were released, in which 40 barrels were recovered.

III. Surface and Ground Water

According the database provided by the New Mexico Office of State Engineer's online database, the average depth of water in this area is 70 feet which is located approximately 1,431 ft. northwest of the location.

IV. Soils

The surface soils in the area are predominantly consists of well drained soils. Typically the surface layer is gravelly fine sandy loam or loamy fine sand. The subsoil is pale brown fine sandy loam, and the substratum is white, platy, indurate caliche. These soils are formed in wind-worked, calcareous sediments over fractured caliche. Slopes are 0 to 3 percent. The vegetation consists of short and mid grasses and shrubs. These soils are used as range and wildlife habitat. Small areas are used for irrigated cropland.

V. Work Performed

On March 1-5, SESI was onsite with Bryan's Oilfield Service to begin remediation of the affected area. The northwest corner fence line of the facility was excavated to a depth of 4' below ground surface (bgs).

A total of five (5) grab samples were retrieved from the bottom of the excavation. All samples were properly preserved and transported under Chain of Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 4500-Cl<sup>-</sup> B).

The results of the analysis are as follows:

Lab ID	Sample ID	Cl <sup>-</sup> (mg/kg)
Analysis Date		03/09/12
H200548-1	#1	608
H200548-2	#2	912
H200548-3	#3	2,840



Lab ID	Sample ID	Cl <sup>-</sup> (mg/kg)
Analysis Date		03/09/12
H200548-4	#4	752
H200548-5	#5	320

On March 21-26, the floor of the excavation was padded and domed with one (1) foot of clean topsoil. Akome, Inc. was onsite to install the 20-mil reinforced geo-membrane liner. Upon completion, the area was padded with an additional one (1) foot of clean topsoil then backfilled with like soils and contoured to grade.

A total of 688 cubic yards of contaminated soil were transported to Sundance Services for disposal.

#### VI. Conclusion

Remedial actions at this site have all been performed with the approval of, and in accordance with all NMOCD requirements.

As a result, we respectfully submit this closure report for your consideration and approval.

#### VII. Figures

Figure 1 – Vicinity Map

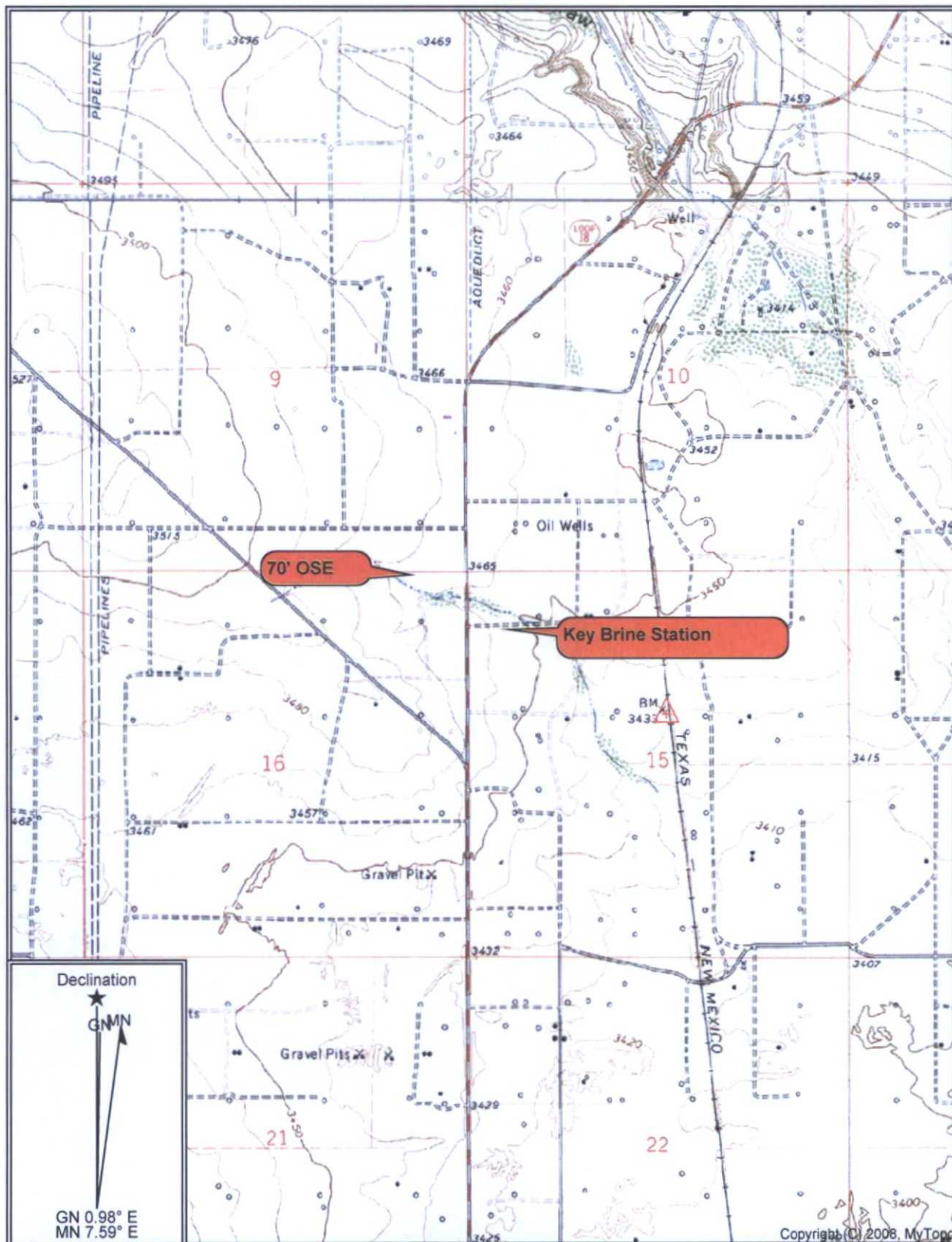
Figure 2 – Site Plan

Appendix A-- Analytical Results

Appendix B—Site Photographs

Appendix C—C-141

**Figure 1**  
**Vicinity Map**

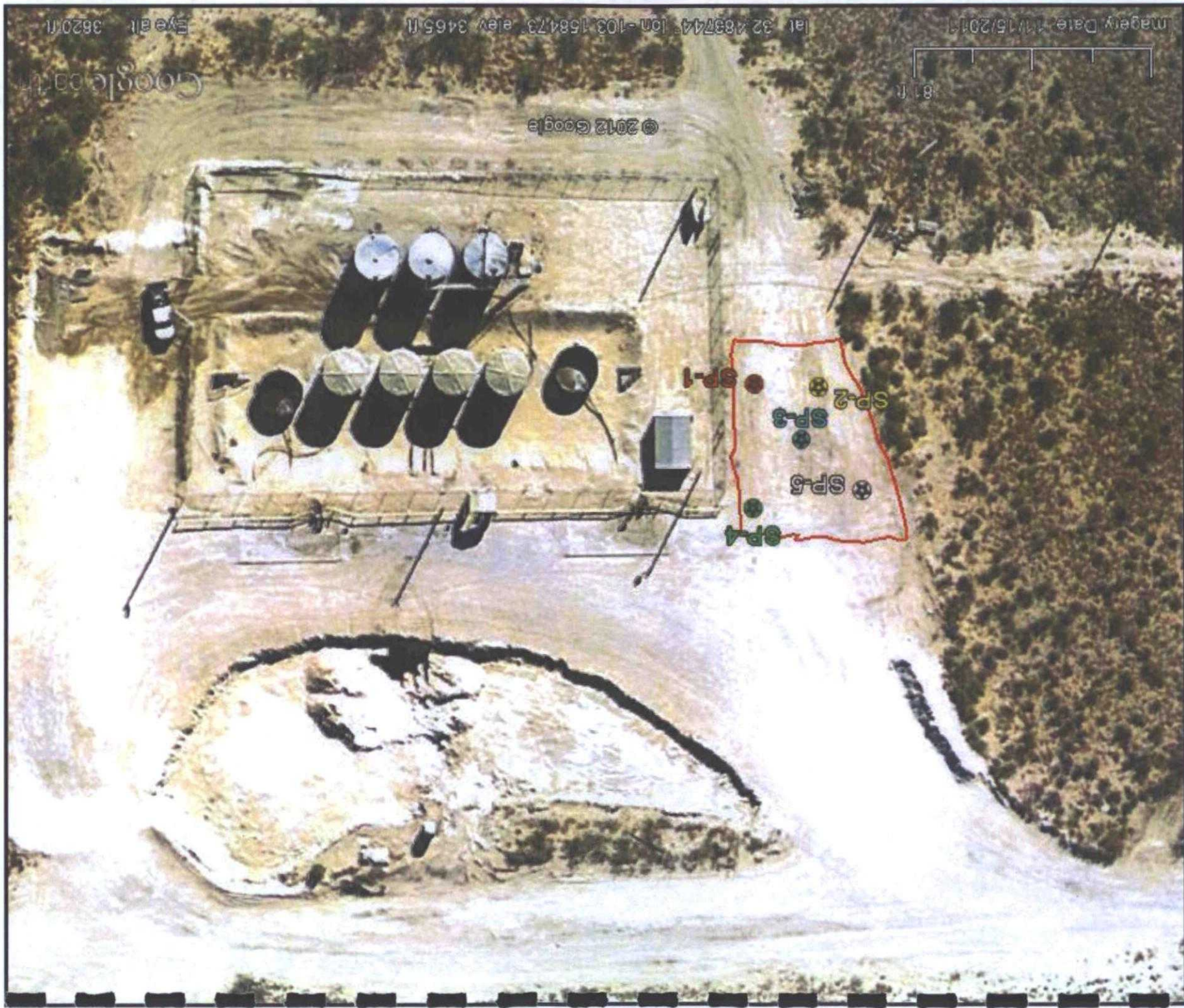


Map Name: EUNICE,  
Scale: 1 inch = 2,000 ft.

Map Center: 032.4841035° N 103.1587867° W  
Map Type: Topographic

**Figure 2**  
**Site Plan**





## **Appendix A**

### **Analytical Results**





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

March 12, 2012

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: BRO-11-002

Enclosed are the results of analyses for samples received by the laboratory on 03/07/12 7:54.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in dark ink, reading "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

 Received: 03/07/2012  
 Reported: 03/12/2012  
 Project Name: BRO-11-002  
 Project Number: KEY BRINE STATION  
 Project Location: EUNICE, NM

 Sampling Date: 03/06/2012  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Celey D. Keene

**Sample ID: #1 (H200598-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	03/09/2012	ND	416	104	400	0.00		

**Sample ID: #2 (H200598-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	912	16.0	03/09/2012	ND	416	104	400	0.00		

**Sample ID: #3 (H200598-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2840	16.0	03/09/2012	ND	416	104	400	0.00		

**Sample ID: #4 (H200598-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	03/09/2012	ND	416	104	400	0.00	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

Safety & Environmental Solutions  
Bob Allen  
703 East Clinton  
Hobbs NM, 88240  
Fax To: (575) 393-4388

Received: 03/07/2012  
Reported: 03/12/2012  
Project Name: BRO-11-002  
Project Number: KEY BRINE STATION  
Project Location: EUNICE, NM

Sampling Date: 03/06/2012  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: #5 (H200598-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	03/09/2012	ND	416	104	400	0.00		

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(505) 393-2326 Fax (505) 393-2476

Page      of     

<b>Company Name: Safety &amp; Environmental Solutions, Inc.</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>	
Project Manager: <b>Bob Allen</b>		P.O. #:			
Address: <b>703 East Clinton</b>		Company: <b>Same</b>			
City: <b>Hobbs</b> State: <b>NM</b> Zip: <b>88240</b>		Attn:			
Phone #: <b>575-397-0510</b> Fax #: <b>575-393-4388</b>		Address:			
Project #: <b>B2011002</b> Project Owner: <b>BRUNCO</b>		City:			
Project Name: <b>KEY BRINE STATION</b>		State:			
Project Location: <b>BUNICE, NM</b>		Phone #:			
Sample Name: <b>SERGIO CONTRERAS</b>		Fax #:			

FOR LAB USE ONLY		Matrix		PRESERV		SAMPLING	
Lab I.D.	Sample I.D.	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE:
							ICE / COOL
							OTHER:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME
H200548	#1	G	1									3-6-12	1345
	#2	G	1										1355
	#3	G	1										1357
	#4	G	1										1404
	#5	G	1										1410

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Delivered By: <i>[Signature]</i> Date: <b>3/7/12</b> Time: <b>7:34</b>		Received By: <i>[Signature]</i> Date: <b>3/7/12</b> Time: <b>7:54</b>	
Sampler Relinquished: <i>[Signature]</i> Relinquished By: <i>[Signature]</i> Date: <b>3/7/12</b> Time: <b>7:54</b>		Checked By: <i>[Signature]</i> Temp. <b>17.5°C</b> Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Temp. <b>7:54</b>	

Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Checked By: (Initials) <i>[Initials]</i>	
--	--	---	--

Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: Add'l Fax #: REMARKS:	
--	--

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

## **Appendix B**

### **Site Photographs**



Site Photographs March 1, 2012



Site before excavation looking south



Site before excavation looking north



Site excavation looking north



Site excavation looking south



Site Photographs March 2, 2012



Excavation facing north



Excavation facing South

Site Photographs March 5, 2012



East end of excavation facing North



West end of excavation facing North



Site Photographs March 6, 2012



Excavation facing north

Site Photographs March 21, 2012



20 mil liner bottom hole of excavation facing southeast

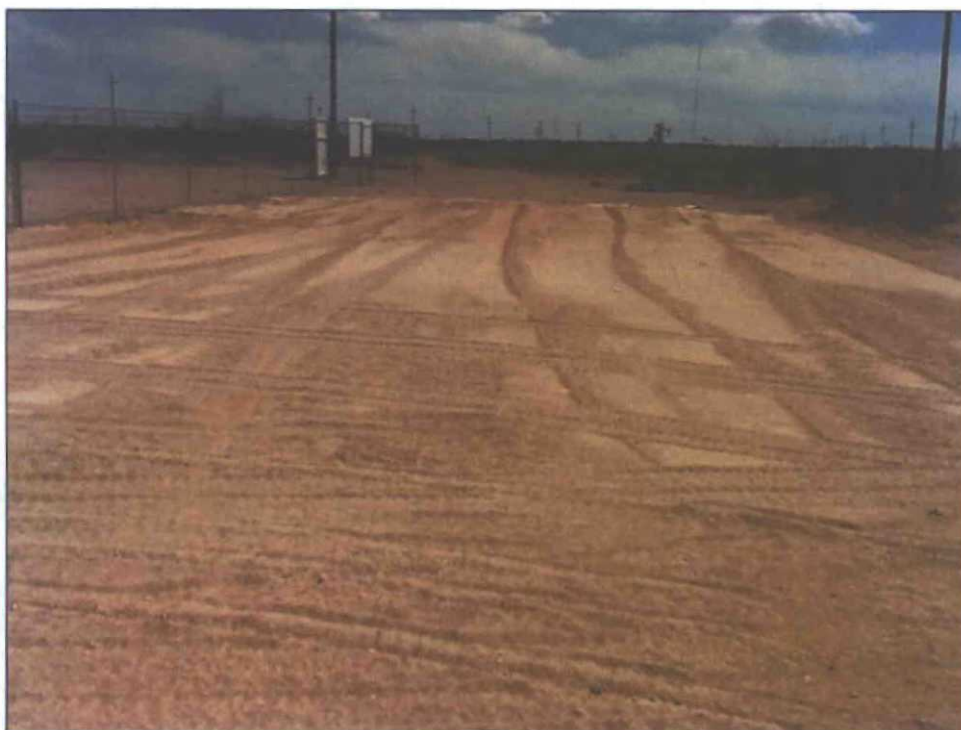
Site Photographs March 26, 2012



Topsoil process



Topsoil on liner facing North



Spill area after liner installation and backfill process



Completion of site facing South



**Appendix C**  
**C-141**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Key Energy Service	Contact	Bob Fisher
Address	Box 99 Eunice, N.M.	Telephone No.	575-394-2581
Facility Name	State S Water Station	Facility Type	Brine & Fresh Water Sales
Surface Owner	Deck Estate	Mineral Owner	State of New Mexico
		Lease No.	MS 0004 0001

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	15	21S	37E	1340	north	330	west	Lea

Latitude N 32° 29' Longitude W 103° 09' 28.8"

NATURE OF RELEASE

Type of Release	over loaded truck	Volume of Release	100 bbls	Volume Recovered	40 bbls
Source of Release	transport truck-Bronco Services	Date and Hour of Occurrence	5-30-2011 @ 6 am	Date and Hour of Discovery	5-30-2011 @ 8 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Noey Franco. Supervisor on duty			
By Whom?	John Sanders	Date and Hour 5-30-2011 @ 8 am			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken.* Bronco Services truck operator fell asleep while loading his truck.					
Describe Area Affected and Cleanup Action Taken.* Area North of the loading docks. Ramon Ponce with Bronco Services Will take care of the clean up & expense					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Signature: Robert J Fisher		OIL CONSERVATION DIVISION			
Printed Name: Bob Fisher		Approved by <u>WV. Specialist</u> District Supervisor <u>Jeff Borking</u>			
Title: District Manager		Approval Date: <u>4/19/12</u>		Expiration Date: <u>—</u>	
E-mail Address: <u>rfisher@keyenergy.com</u>		Conditions of Approval: <u>—</u>		Attached <input type="checkbox"/>	
Date: 5-31-2011		Phone: 575-394-2581		<u>IRP-11-11-2761</u>	

\* Attach Additional Sheets If Necessary